

# Arrest Histories of High-Risk Gay and Bisexual Men in Miami: Unexpected Additional Evidence For Syndemic Theory<sup>†</sup>

Steven P. Kurtz, Ph.D.\*

**Abstract**—Gay and bisexual men continue to suffer the highest burden of HIV/AIDS in the U.S. Since the beginning of the epidemic, substance abuse has been shown to be one of the strongest predictors of sexual risk behaviors and seroconversion among this population. Recent research has focused on additional aspects of health risk disparities among gay and bisexual men, including depression and other mental health problems, childhood sexual abuse, and adult victimization, suggesting that these men are impacted by a syndemic of health risks. The involvement of gay and bisexual men with the criminal justice system is largely absent from the literature. This article describes the nature, extent and predictors of the arrest histories of a sample of gay and bisexual substance users at very high risk for HIV infection and/or transmission. These histories are surprisingly extensive, and are strongly associated with poverty, severe mental distress, substance abuse and dependence, and victimization. The involvement of gay and bisexual men in the criminal justice system deserves a stronger research focus because of the unique challenges facing such men and also because arrests are yet another marker for a host of health risks among them.

**Keywords**—arrest history, gay men, HIV/AIDS, MSM, syndemic theory

Men who have sex with men (MSM) continue to suffer the highest burden of HIV/AIDS in the U.S (CDC 2008). Since the beginning of the epidemic, substance abuse has been shown to be one of the strongest predictors of sexual risk behaviors and seroconversion among this population (Mansergh et.al. 2006; Kurtz 2005; Chesney, Barrett & Stall 1998). Recent research has focused on additional aspects

---

<sup>†</sup>This research was supported by HHS Grant # R21-DA019840 from the National Institute on Drug Abuse.

\*Scientist, University of Delaware Center for Drug and Alcohol Studies, Coral Gables, FL.

Please address correspondence and reprint requests to Steven P. Kurtz, Ph.D., University of Delaware Center for Drug and Alcohol Studies, 2100 Ponce de Leon Blvd., Suite 430, Coral Gables, FL 33134. Phone: 305-529-191, fax: 305-529-2501, email: skurtz@udel.edu

of health disparities among MSM, including depression and other mental health problems (Cochran & Mays 2008), childhood sexual abuse (Purcell, Patterson & Spikes 2008), and adult victimization (Herek & Sims 2008), suggesting that these men are impacted by a syndemic—a set of mutually reinforcing epidemics—of health problems (Stall, Friedman & Catania 2008). This theoretical perspective has broadened the scope of MSM health research well beyond the HIV/AIDS and substance abuse fields.

The involvement of gay and bisexual men with the criminal justice system is almost entirely absent from the literature, however, even though rates of drug abuse problems and HIV/AIDS infection are much higher among prison and jail inmates than among the general population (CDC

2001). This article begins to address this gap by describing the nature, extent and predictors of the arrest histories of a sample of gay and bisexual substance users at very high risk for HIV infection and/or transmission. Because the participants in the study described here were self-identified gay and bisexual men, the term *gay/bisexual men* is used to describe the sample throughout the balance of the article. The term *MSM* is used to describe the findings of other studies in those cases where sexual behavior was the defining parameter for the sample.

## HEALTH DISPARITIES AMONG GAY/BISEXUAL MEN

### Substance Use

Gay/bisexual men tend to suffer higher rates of substance abuse than the general population (Ostrow & Stall 2008) and substance use is a strong predictor of HIV sexual risk behaviors and seroconversion. A wide variety of substances have been shown to predict unprotected anal intercourse among gay/bisexual men, including alcohol (Halkitis & Parsons 2002), Ecstasy (Klitzman, Pope & Hudson 2000), nitrate inhalants (Darrow et al. 1998), methamphetamine (Molitor et al. 1998) and cocaine (McNall & Remafedi 1999). Research findings about individual substances are divergent in part because the popularity of specific drugs in gay communities—and specifically the popularity for use during sex—tends to change rapidly (NDIC 2007; Kurtz 2005). Polydrug use is also common among gay/bisexual men (Greenwood et al. 2001).

### HIV/AIDS

More than two thirds (68%) of all men living with HIV are MSM, even though only about 5% to 7% of men in the United States reported having sex with other men (CDC 2008). After many years of decline, rates of HIV infection have been increasing among gay/bisexual men since 2001, accounting for about 53% of all new HIV/AIDS cases in 2005. As rates of HIV infection have risen, many communities have also experienced large increases in rates of HIV and sexually transmitted infections (STI) among this group (Ciesielski 2003).

### Mental Health Problems

Gay/bisexual men have higher rates of depression than the general adult male population (Mills et al. 2004). Studies of gay men document that a lack of social support often leads to depression and low self-acceptance (Díaz et al. 2001; Vincke & Bolton 1994). Psychological distress is an important predictor of high-risk sexual behavior among gay/bisexual men and reductions in symptoms of depression are associated with reduced sexual risks (Koblin et al. 2006; Kalichman et al. 1997). Sexual sensation seeking (the need for novel sexual experiences and the willingness to take risks to have them; Kalichman et al. 1994) is another aspect of mental health that appears to impact gay/bisexual

men more than heterosexual men (McCoul & Haslam 2001) and is associated with both sexual risks and with substance use prior to sex (Dolezal et al. 1997; Berg 2008).

### Victimization

In addition to social stigma, gay/bisexual men suffer higher rates of childhood sexual abuse (Purcell, Patterson & Spikes 2008) and adult victimization (Herek & Sims 2008) than heterosexual men. Men who develop same-sex attraction and who disclose their sexual orientation at younger ages are especially vulnerable to sexual abuse and to emotional and physical victimization (Friedman et al. 2007). Victimization predicts poor health outcomes among gay/bisexual men, including substance use, HIV infection and depression (Brennan et al. 2007; Houston & McKirnan 2007).

### Risks Associated with Attachment to Gay Subcultures

Gay/bisexual men frequently migrate to urban areas in an attempt to avoid discrimination and alienation and to find support and acceptance from other men like themselves (Mills et al. 2001). Although support from friends has been shown to have a significant stress-buffering effect on gay men (Nardi & Sherrod 1994), other evidence suggests that seeking social support through gay community attachment may lead to sexual behavioral risks (Stall et al. 2003). In part, this increased risk may be related to internalized homophobia, as gay men attempt the performance of hegemonic masculine roles and sexuality and react with hostility toward effeminacy (Taywaditep 2001; Halkitis 1999).

Also, since the advent of the gay civil rights movement, gay male subcultures in large cities have maintained an intimate connection between recreational drug use, all-night parties, and sexual freedom (Kurtz 2005; Kramer 1978). The circuit party (generally, a large week-long dance event that attracts a national or international gathering of gay men) was the primary symbol of this theme throughout the 1990s (Signorile 1997). More recently, the Internet is a primary contact point for sex parties and individual hookups that include the combining of drugs with casual sex encounters (Kim et al. 2002).

In addition to high rates of sexual risk behaviors and substance abuse that may come to be seen as normative by many men attached to gay subcultures, the loss of social capital is a third health and social risk factor. Social capital built up within the home community is often lost upon migration, and urban gay subcultures are frequently limited in their capacity to provide access and connections to economic opportunities or to the larger society with its broad range of options for social support and engagement (Kurtz In press).

### Gay/Bisexual Men and the Criminal Justice System

The involvement of gay and bisexual men with the criminal justice system is largely absent from the literature

(Fisher et al. 2004; Ellis, Hoffman & Burke 1990). This is somewhat surprising, given the disproportionate impact of substance abuse and dependence on gay/bisexual men and the large role that drug abuse and drug distribution play in the U.S. criminal justice system. One hindrance to gaining a better understanding of this issue is the lack of sexual orientation and/or sexual behavior data collected from arrestees by law enforcement.

Only one study of gay/bisexual male arrest histories was uncovered in an extensive search. Fisher and colleagues (2004) compared the arrest histories of heterosexual and gay/bisexual male participants in two research studies based in southern California. Sexual orientation classification was based on past 30 day sexual behaviors. The study found that gay/bisexual men were 55% less likely than their heterosexual counterparts to ever have been arrested, and that, among them: (1) prior substance abuse treatment history was the strongest predictor of arrest; (2) current employment was a protective factor; and (3) sex exchanges for money and drugs and a history of STD infection were predictive of prior arrest. Data on the nature of the charges leading to the arrests reported in the study were not collected.

## METHODS

### Site

Miami/Dade County, Florida, is an extremely diverse community, having a high population of foreign-born (50.9%) residents (U.S. Census Bureau 2008). Hispanics (61.3%) are the largest ethnic group, with "Anglos" (defined locally as non-Hispanic Whites) representing 18.3%, and Black/African-Americans 20.2% of the county population. As a well-known migration destination for gay/bisexual men, and with an estimated 76,500 MSM in Miami alone (Lieb et al. 2004), men of widely divergent sexual cultures and levels of HIV prevention knowledge share the space of a highly sexualized and sexually commodified geography (Albin 1995; Webster, Darrow, Paul et al. 2003)

By 2005, the Miami Metropolitan Statistical Area reported 52.8 AIDS cases per 100,000 persons, the highest rate in the U.S. (CDC 2007). HIV positivity rates for new tests of MSM in Florida continue to trend upward (Miami-Dade County Health Department 2007). Racial/ethnic distributions of MSM AIDS cases in Miami continue to be roughly proportionate to the racial/ethnic ratios in the overall population, with White/Anglo men modestly overrepresented. Seroprevalence among MSM cannot be precisely quantified, but population-based estimates in South Florida range from 18% to 31% (Miami-Dade County Health Department 2007; Holmberg 1996). The seroprevalence rate among substance-using MSM is undoubtedly much higher. Further, many HIV-positive men in South Florida do not know they are infected; a recent venue-based study in Miami found that 46% of HIV-positive MSM were unaware of their infection (CDC 2005).

### Recruitment, Eligibility, and Informed Consent

Between April 2006 and February 2007, substance-using gay and bisexual men were recruited by trained peer field staff into a developmental HIV prevention intervention preliminary field trial through targeted sampling strategies (Watters & Biernacki 1989). South Florida zip codes with high concentrations of gay residential areas, entertainment venues, health and social service agencies, and sex solicitation and cruising sites were mapped. In addition to geographic mapping, the Internet sites commonly used by local men for making sexual connections were also documented, with an emphasis on those websites where sexual interactions combined with drug use are often solicited. Using all of these sources, potential participants were contacted through direct outreach, print and electronic media advertisements, flyers placed in health and social service agencies, banner ads on sex-oriented websites, and chat room contacts through websites that permitted the posting of service-oriented profiles. Recruitment efforts aimed to maximize diversity in terms of age, ethnicity and serostatus. All notices directed interested men to the project website, which described the study in more detail. The project was housed in a field office conveniently located to the county highway system and to residential concentrations of gay and bisexual men.

Eligibility requirements included the following criteria, which were designed to reach those men at highest risk for HIV infection, reinfection and/or transmission: (a) being sexually active, defined as three or more anal intercourse events with a nonprimary male partner(s) in the previous three months, including at least one occurrence of unprotected anal intercourse; (b) current and frequent use of illicit drugs three or more times during the previous month, including cocaine, heroin, MDMA, GHB, ketamine, hallucinogens, and/or methamphetamine; and/or heavy episodic alcohol use, defined as five or more drinks at one sitting three or more times in the past month; (c) being between the ages of 18 and 55; (d) not having been newly diagnosed with HIV infection in the previous six months, and (e) not having participated in a substance abuse treatment or HIV prevention program in the past year.

At the first formal contact, callers were screened to determine eligibility over the telephone. Eligible men who expressed interest in participating were asked to visit the field office, where trained interviewers explained the confidential nature of the study and the purpose of the project. Those agreeing to participate reviewed and signed informed consent using procedures approved by the University of Delaware's Institutional Review Board. They completed a standardized baseline demographic, behavioral, health history and social risk assessment. The baseline interview lasted approximately 90 minutes and was conducted using laptop-based computer-assisted personal interviewing procedures. Participants were paid \$50 for their time and travel costs. Only data from participants' baseline interviews are presented in this report.

**TABLE 1**  
**Demographic, Social Stability, Mental Health and Victimization Characteristics of Enrollees in an HIV Risk Reduction Intervention for Substance-Using Gay/Bisexual Men in Miami (N = 124)**

	N	%
<b>Demographics</b>		
Race/Ethnicity		
African American	38	30.6
Hispanic	49	39.5
White/Anglo	34	27.4
Other	3	2.4
HIV-Positive	46	37.1
Age (Median; Range 19-55)	37	
Income (Median)	\$17,000	
Education (Median Years)	14	
<b>Social Stability</b>		
Homelessness History	60	48.4
Substance Treatment History	49	39.5
Arrest History	81	65.3
<b>Mental Health</b>		
Moderate /Severe Depression	93	75.0
Moderate /Severe Anxiety	72	58.1
Moderate/Severe Traumatic Stress	55	44.4
High Sex Sensation Seeking	49	39.5
DSM-IV Substance Dependence	66	53.2
<b>Victimization History</b>		
Sexual Abuse	38	30.6
Violent Abuse	77	62.1
Emotional Abuse	80	64.5
First Abuse before Age 18	58	46.8

### Measures and Analyses

The Global Appraisal of Individual Needs (GAIN v. 5.4; Dennis et al. 2002) was the primary component of the standardized baseline assessment. In addition to the collection of demographic, life history, and social risk data, the GAIN includes DSM IV-R diagnostics for substance abuse and dependence as well as clinical measures of depression, anxiety and other mental health problems. The primary dependent variable for this report was lifetime arrest history. This item was assessed by the question, "How many times in your lifetime have you been arrested, charged with a crime and booked," followed by an itemization of the charges for each reported arrest.

To the extent possible, hypothesized predictors of arrest were also assessed using lifetime historical measures, e.g., "When was the last time that you considered yourself to be homeless?" Substance use data were collected using lifetime and 90-day measures; current use data are reported in the tables to describe the sample, whereas lifetime use variables are included in regression models to predict lifetime arrest. Clinical measures of mental health problems reflect symptoms experienced in the year prior to baseline

interview; these scales all had Cronbach's alphas of over .9 in the present study. Sexual sensation seeking was measured using the Sexual Sensation Seeking Scale (SSS; Kalichman & Rompa 1995). The SSS includes 11 Likert-type items scored from 1 ("not at all like me") to 4 ("very much like me") measuring different dimensions of sexual sensation seeking. The measure is widely used in research on gay/bisexual men, highly predictive of HIV risk behaviors, and showed good internal consistency ( $\alpha=.76$ ) in the present study. Serostatus was based upon self-report rather than contemporaneous testing.

Data from the interview questionnaires were analyzed using a standard statistical package, SPSS 16.0 for Windows (SPSS Inc. 2008). Descriptive statistics were calculated to describe the sample in terms of demographics, social stability, mental health, victimization, substance use and sexual risk behaviors, as well as to investigate the nature and extent of the arrest histories of these highly vulnerable gay/bisexual men. Bivariate and multivariate logistic models were developed to predict both lifetime arrest and crime category (property, violent, drug and status crimes) by demographics and by measures of health disparities suggested by syndemic

**TABLE 2**  
**Past 90 Day Substance Use and Sexual Behavior Characteristics of Enrollees in an HIV Risk Reduction Intervention for Substance-Using Gay/Bisexual Men in Miami (N = 124)**

	N	%
<b>Substance Use</b>		
Heavy Episodic Alcohol	96	77.4
Marijuana	82	66.1
Powder/Crack Cocaine	67	54.0
Amyl Nitrite (Poppers)	46	37.1
Rx Opioids /Sedatives (Nonprescribed)	38	30.6
Methamphetamine	28	22.6
MDMA (Ecstasy)	26	21.0
<b>Mean</b>		
<b>Sexual Risk Behaviors (Casual Partners)</b>		
Anal Sex Partners	12.1	
Anal Sex Times	32.8	
Unprotected Anal Sex Times	18.2	

theory, including substance use, mental health distress, sex sensation seeking, and victimization.

## RESULTS

### Demographics, Social Stability, Mental Health and Victimization

Demographics, social stability, mental health and victimization characteristics of the sample are shown in Table 1. The ethnic mix of South Florida's population was fully represented in the sample, which also included a wide age range and significant numbers (over 37%) of HIV-positive men. These demographics reflect the targeted sampling strategies, which aimed for maximum diversity across these variables. Education levels averaged two years of college, but income levels were quite low.

Social risk indices were high across all measures, with almost half (48.4%) having been homeless at least once in their lifetime, 39.5% reporting past substance abuse treatment, and almost two-thirds (65.3%) having been arrested. Depression, anxiety and traumatic stress levels were clinically significant for sizeable proportions of respondents. Sexual sensation seeking was high for the sample in comparison to other studies of gay/bisexual men (Stolte, De Wit & Kolader 2006; Kalichman & Rompa 1995). More than half (53.2%) of the men met DSM-IVR diagnostic criteria for substance dependence in the past year. Lifetime rates of emotional, physical, and sexual victimization were very high as well, and almost half (46.8%) reported that the first episode of abuse occurred when they were minors. More than a third (33.9%) of respondents were *currently* worried about being abused (data not shown).

### Substance Use and Sexual Risk Behaviors

Table 2 shows current (past 90 day) substance use and sexual risk behaviors. Participants were current users of a

wide range of substances, including: heavy episodic alcohol (77.4%), marijuana (66.1%), powder or crack cocaine (54%), amyl nitrite (37.1%), nonprescribed pain killers and/or sedatives (30.6%), methamphetamine (22.6%), and Ecstasy (21%). The sample reported being high or drunk all day on an average of 24 out of the past 90 days (data not shown). Participants averaged over 12 different anal sex partners and over 18 unprotected anal intercourse events with non primary partners in the past 90 days.

### Arrest Histories

Arrest histories by type of crime are shown in Table 3. The distribution of crimes was widespread across all categories, including property and violent crimes in addition to the drug violations that would be expected given the study eligibility criteria. Property crimes were primarily related to aspects of theft rather than destruction. Status crimes included a number of subcategories that are or are possibly (e.g., trespassing, vagrancy) related to engaging in sex in public places and likely more prevalent among gay and bisexual men than other populations. Of the 81 participants with arrest histories, just 25 (30.9%) had been arrested only once, 16 (20%) two times, and almost half (49.3%) three or more times. Among those with multiple arrests, few (23.2%) had been arrested for only one type of crime.

### Predictors of Arrest Histories

Results of bivariate and multivariate logistic regression models predicting arrest histories are shown in Table 4, with the significance level set at  $p < .05$ . Almost all of the hypothesized mental health and social risk indices are significant in the bivariate models, with substance abuse treatment history, cocaine use and a lower level of education demonstrating the most powerful effects. Abuse of prescription sedatives and/or opioids was also strongly related to prior arrest history. Measures of poverty, including lifetime homelessness and

**TABLE 3**  
**Lifetime Arrest Histories by Major Crime Category and Significant Subcategories of Enrollees in an HIV Risk Reduction Intervention for Substance-Using Gay/Bisexual Men in Miami (N = 124)**

	N	%
Property Crimes	35	28.2
Larceny/Theft	21	16.9
Shoplifting	16	12.9
Burglary	11	8.9
Stolen Goods	9	7.3
Motor Vehicle Theft	7	5.6
Vandalism	6	4.8
Passing Checks/Forgery	6	4.8
Arson	3	2.4
Violent Crimes	24	19.4
Aggravated Assault	15	12.1
Simple Assault/Battery	12	9.7
Robbery	8	6.5
Drug/Alcohol Crimes	48	38.7
Possession/Distribution of Drugs	35	28.2
Driving Under the Influence	26	21.0
Drunkenness	8	6.5
Status Crimes	46	37.1
Driving Without Valid License	9	7.3
Prostitution	6	4.8
Gambling	3	2.4
Trespassing	3	2.4
Indecent Exposure/Lewd Behavior	3	2.4
Possession of Paraphernalia	3	2.4

**TABLE 4**  
**Predictors of Arrest History Among Enrollees in an HIV Risk Reduction Intervention for Substance-Using Gay/Bisexual Men in Miami (N = 124)**

	OR	95% CI	p
<b>Bivariate Models*</b>			
<b>Demographics:</b>			
High School Education or Less	14.468	3.270, 64.011	.000
Annual Income < \$15000	2.971	1.292, 6.836	.010
<b>Social Stability:</b>			
Homelessness History	5.914	2.496, 14.011	.000
Substance Treatment History	26.286	5.944, 116.238	.000
<b>Lifetime Substance Use:</b>			
Ecstasy	2.252	1.053, 4.817	.036
Powder or Crack Cocaine			
Amount of Alcohol Use	11.400	3.825, 33.972	.000
Prescription Opioids	7.989	2.609, 24.464	.000
Prescription Sedatives	4.809	1.984, 11.655	.001
<b>Victimization:</b>			
Physical Abuse History	3.944	1.795, 8.664	.001
First Abuse Before 18	3.704	1.637, 8.379	.002
<b>Mental Health:</b>			
Severe Mental Distress**	2.941	1.162, 7.442	.023
High Sex Sensation Seeking	4.146	1.712, 10.045	.002
<b>Multivariate Models</b>			
High School Education or Less	9.201	1.725, 49.079	.009
Substance Treatment History	13.907	2.926, 66.105	.001
Powder or Crack Cocaine	5.647	1.479, 21.570	.011
High Sex Sensation Seeking	4.468	1.484, 13.450	.008

\*Nonsignificant predictors included age, serostatus and lifetime methamphetamine or amyl nitrite use.

\*\*A composite measure of depression, anxiety and traumatic stress

lower current income, were related to participants' criminal justice involvement as well. Prior victimization, including a history of physical abuse and childhood abuse, increase the likelihood of having been arrested, as did higher levels of mental health distress, including sexual sensation seeking. In multivariate models, substance abuse treatment, use of cocaine, high sex sensation seeking and lower education level emerged as strong independent predictors of prior arrest.

In additional bivariate analyses not shown in the table, these same variables generally predicted each of the four types of arrests (property, violent, drug, and status crimes) separately. The only areas in which the four specialized models meaningfully diverged from the overall arrest history model were: (1) severe mental health distress was unrelated to arrests for property crimes; and (2) lower education and prior physical abuse were unrelated to arrests for drug crimes. These results may be due to the loss of power available for the analyses of predictors by type of crime.

## DISCUSSION

There are two primary limitations to the study. First, the results are likely not generalizable to the overall population of gay/bisexual men in Miami because of the stringent eligibility requirements needed to generate a very high-risk sample for the intervention field trial. Arrest histories were no doubt much higher for the regular substance-using participants recruited to the project compared to ineligible gay/bisexual men. Also, the data presented here rely on self-report, and some respondents may have refrained from reporting the full extent of socially undesirable behaviors. Given the extensive substance abuse and sexual risk behaviors reported by the participants in the study, underreporting of these and other stigmatized behaviors would seem less likely.

Among the highly vulnerable gay/bisexual men described here, arrest histories were more common and more varied than anticipated. Although drug-related arrests would be expected among substance users (and it was not

possible to distinguish drug possession from drug distribution charges), there are no data in the literature that would point to the prevalence of property and violent crime among the gay/bisexual men found here. Furthermore, the most likely experience of the respondents was to have been arrested for *multiple types* of crime.

Arrest history was also closely connected to many aspects of the syndemic theory of gay/bisexual men's health disparities, including mental distress, sex sensation seeking, victimization, and substance abuse and dependence. Although social capital was not directly measured by the assessments, the relatively poor economic circumstances and high levels of social instability reported by the study participants point to the lack of social capital as a potentially important aspect of syndemic theory. It is especially from the perspective of relative economic poverty—an attribute not usually ascribed to this population—that the extensive criminal justice involvement of this sample of gay/bisexual men may find the most cogent explanation.

Questions about how and why gay men's health disparities, victimization histories, and socioeconomic status and access are implicated in their criminal justice involvement cannot be answered by the present study, however, and point to the need for broader and deeper explorations of the criminal justice histories of gay and bisexual men. A few of the important research questions would appear to be: (1) What are the relative roles of substance abuse, mental distress, victimization and social capital in explaining gay/bisexual men's criminal behavior?; (2) Are different types of crimes differently related to these predictors?; (3) How do sexual sensation seeking and other aspects of sexuality relate to criminal justice involvement?; and (4) What are gay/bisexual arrestees' experiences with law enforcement and the corrections systems? Unless and until there are widespread institutional efforts to collect sexual identification and behavioral data within criminal justice systems, behavioral researchers with access to gay and bisexual men might strongly consider including these questions in data collection instruments and qualitative research programs.

## REFERENCES

- Albin, G. 1995. To live and die in South Beach. *Out* 73-77:125-28.
- Berg, R.C. 2008. Barebacking among MSM Internet users. *AIDS Behavior* 12 (5): 822-33.
- Brennan, D.J.; Hellerstedt, W.L.; Ross, M.W. & Welles, S.L. 2007. History of childhood sexual abuse and HIV risk behaviors in homosexual and bisexual men. *American Journal of Public Health* 97 (6):1107-12.
- Centers for Disease Control and Prevention (CDC). 2008. *HIV/AIDS and Men Who Have Sex with Men (MSM)*. Available at [www.cdc.gov/hiv/topics/msm/](http://www.cdc.gov/hiv/topics/msm/).
- Centers for Disease Control and Prevention (CDC). 2007. *Table 15. Reported AIDS Cases and Annual Rates (per 100,000 Population), by Metropolitan Statistical Area of Residence, 2004, 2005, and Cumulative—United States and Puerto Rico*. Available at [www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/](http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2005report/)
- Centers for Disease Control and Prevention (CDC). 2005. HIV prevalence, unrecognized infection, and HIV testing among men who have sex with men—five U.S. cities, June 2004—April 2005. *MMWR: Morbidity and Mortality Weekly Report* 54 (24): 597-601.
- Centers for Disease Control and Prevention (CDC). 2001. *Drug Use, HIV, and the Criminal Justice System*. Available at [www.cdc.gov/odu/facts/criminaljusticefactsheet.pdf](http://www.cdc.gov/odu/facts/criminaljusticefactsheet.pdf)
- Chesney, M.A.; Barrett, D.C. & Stall, R. 1998. Histories of substance use and risk behavior: Precursors to HIV seroconversion in homosexual men. *American Journal of Public Health* 88 (1): 113-16.
- Ciesielski, C.A. 2003. Sexually transmitted diseases in men who have sex with men: An epidemiologic review. *Current Infectious Disease Reports* 5 (2): 145-52.

- Cochran, S.D. & Mays, V.M. 2008. Prevalence of primary mental health morbidity and suicide symptoms among gay and bisexual men. In: R. Wolitski; R. Stall & R.O. Valdiserri (Eds.) *Unequal Opportunity: Health Disparities Affecting Gay and Bisexual Men in the United States*. New York: Oxford University Press.
- Darrow, W.W.; Webster, R.D.; Kurtz, S.P.; Buckley, A.K.; Patel, K.I. & Stempel, R.R. 1998. Impact of HIV counseling and testing on HIV-infected men who have sex with men: The South Beach Health Survey. *AIDS and Behavior* 2 (2): 115-26.
- Dennis, M.L.; Titus, J.C.; White, M.K.; Unsicker, J.I. & Hodgkins, D. 2002. *Global Appraisal of Individual Needs—Initial (GAIN-I)*. Bloomington, IL: Chestnut Health Systems.
- Díaz, R.M.; Ayala, G.; Bein, E.; Henne, J. & Marin, B.V. 2001. The impact of homophobia, poverty, and racism on the mental health of gay and bisexual Latino men: Findings from 3 US cities. *American Journal of Public Health* 91 (6): 927-36.
- Dolezal, C.; Meyer-Bahlburg, H.F.L.; Remien, R.H. & Petkova, E. 1997. Substance use during sex and sensation seeking as predictors of sexual risk behavior among HIV+ and HIV- gay men. *AIDS and Behavior* 1 (1): 19-28.
- Ellis, L.; Hoffman, H. & Burke, D.M. 1990. Sex, sexual orientation and criminal and violent behavior. *Personality and Individual Differences* 11 (12): 1207-12.
- Fisher, D.G.; Milroy, M.E.; Reynolds, G.L.; Klahn, J.A. & Wood, M.M. 2004. Arrest history among men and sexual orientation. *Crime & Delinquency* 50 (1): 32-42.
- Friedman, M.S.; Marshall, M.P.; Stall, R.; Cheong, J. & Wright, E.R. 2007. Gay-related development, early abuse and adult health outcomes among gay males. *AIDS and Behavior* 12 (6): 891-902.
- Greenwood, G.L.; White, E.W.; Page-Shafer, K.; Bein, E.; Osmond, D.H.; Paul, J. & Stall, R. 2001. Correlates of heavy substance use among young gay and bisexual men: The San Francisco Young Men's Health Study. *Drug and Alcohol Dependence* 61 (1): 105-12.
- Halkitis, P.N. 1999. Masculinity in the age of AIDS: HIV-seropositive gay men and the "buff agenda." In: P. Nardi (Ed.) *Gay Masculinities*. Newbury Park, CA: Sage Publications.
- Halkitis, P.N. & Parsons, J.T. 2002. Recreational drug use and HIV-risk sexual behavior among men frequenting gay social venues. *Journal of Gay & Lesbian Social Services* 14 (4): 19-38.
- Herek, G.M. & Sims, C. 2008. Sexual orientation and violent victimization: Hate crimes and intimate partner violence among gay and bisexual males in the United States. In: R. Wolitski; R. Stall & R.O. Valdiserri (Eds.) *Unequal Opportunity: Health Disparities Affecting Gay and Bisexual Men in the United States*. New York: Oxford University Press.
- Holmberg, S.D. 1996. The estimated prevalence and incidence of HIV in 96 large US metropolitan areas. *American Journal of Public Health* 86 (5): 642-51.
- Houston, E. & McKirnan, D.J. 2007. Intimate partner abuse among gay and bisexual men: Correlates and health outcomes. *Journal of Urban Health* 84 (5): 681-90.
- Kalichman, S.; Johnson, J.; Adair, V. & Rompa, D. 1994. Sexual sensation seeking: Scale development and predicting AIDS-risk behavior among homosexually active men. *Journal of Personality Assessment* 62 (3): 385-97.
- Kalichman, S.C. & Rompa, D. 1995. Sexual sensation seeking and sexual compulsivity scales: Reliability, validity, and predicting HIV risk behavior. *Journal of Personality Assessment* 65 (3): 586-601.
- Kalichman, S.C.; Kelly, J.A.; Morgan, M. & Rompa, D. 1997. Fatalism, current life satisfaction, and risk for HIV infection among gay and bisexual men. *Journal of Consulting and Clinical Psychology* 65 (4): 542-46.
- Kim, A.A.; Kent, C.; McFarland, W. & Klausner, J.D. 2002. Cruising on the Internet highway. *Journal of Acquired Immune Deficiency Syndromes* 28 (1): 89-93.
- Klitzman, R.L.; Pope Jr., H.G. & Hudson, J.I. 2000. MDMA ("Ecstasy") abuse and high-risk sexual behaviors among 169 gay and bisexual men. *American Journal of Psychiatry* 157: 1162-64.
- Koblin, B.A.; Husnik, M.J.; Colfax, G.; Huang, Y.; Madison, M.; Mayer, K.; Barresi, P.J.; Coates, T.J.; Chesney, M.A. & Buchbinder, S. 2006. Risk factors for HIV infection among men who have sex with men. *AIDS* 20 (5): 731-39.
- Kramer, L. 1978. *Faggots*. New York: First Plume Printing.
- Kurtz, S.P. In press. Between Kansas and Oz: Drugs, sex, and the search for gay identity in the fast lane. In: P. Hammack & B. Cohler (Eds.) *The Story of Sexual Identity: Narrative Perspectives on the Gay and Lesbian Life Course*. New York: Oxford University Press. (Release date February 2009).
- Kurtz, S.P. 2005. Post-circuit blues: Motivations and consequences of crystal meth use among gay men in Miami. *AIDS and Behavior* 9 (1): 63-72.
- Lieb, S.; Friedman, S.R.; Zeni, M.B.; Chitwood, D.D.; Liberti, T.M.; Gates, G.J.; Metsch, L.R.; Maddox, L.M. & Kuper, T. 2004. An HIV prevalence-based model for estimating urban risk populations of injection drug users and men who have sex with men. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 81 (3): 401-15.
- Mansergh, G.; Shouse, R.L.; Marks, G.; Guzman, R.; Rader, M.; Buchbinder, S. & Colfax, G.N. 2006. Methamphetamine and sildenafil (Viagra) use are linked to unprotected receptive and insertive anal sex, respectively, in a sample of men who have sex with men. *Sexually Transmitted Infections* 82 (2): 131-34.
- McCoul, M. & Haslam, N. 2001. Predicting high risk sexual behavior in heterosexual and homosexual men: The roles of impulsivity and sensation seeking. *Personality and Individual Differences* 31 (8): 1303-10.
- McNall, M. & Remafedi, G. 1999. Relationship of amphetamine and other substance use to unprotected intercourse among young men who have sex with men. *Archives of Pediatric and Adolescent Medicine* 153 (11): 1130-35.
- Miami-Dade County Health Department. 2007. *Re-invigorating HIV: Prevention for Gay Men and Other MSM: A Planning Document for Miami-Dade County*. 2007, Miami, FL: Miami-Dade County Health Department.
- Mills, T.C.; Paul, J.; Stall, R.; Pollack, L.; Canchola, J.; Chang, Y.J.; Moskowitz, J.T. & Catania, J.A. 2004. Distress and depression in men who have sex with men: The Urban Men's Health Study. *American Journal of Psychiatry* 161 (2): 278-85.
- Mills, T.C.; Stall, R.; Pollack, L.; Paul, J.P.; Binson, D.; Canchola, J. & Catania, J.A. 2001. Health-related characteristic of men who have sex with men: A comparison of those living in "gay ghettos" with those living elsewhere. *American Journal of Public Health* 91 (6): 980-83.
- Molitor, F.; Truax, S.; Ruiz, J.D. & Sun, R.K. 1998. Association of methamphetamine use during sex with sexual behaviors and HIV infection among non-injection drug users. *Western Journal of Medicine* 168 (2): 93-97.
- Nardi, P.M. & Sherrod, D. 1994. Friendship in the lives of gay men and lesbians. *Journal of Social & Personal Relationships* 11 (2): 185-99.
- National Drug Intelligence Center (NDIC) & U.S. Department of Justice. 2007. *Intelligence Bulletin: Changes in Drug Production, Trafficking, and Abuse, Third Quarter CY2006*. Product No.: 2007-L0424-001. Johnstown, PA: NDIC.
- Ostrow, D. & Stall, R. 2008. Alcohol, tobacco, and drug use among gay and bisexual men. In: R. Wolitski; R. Stall & R.O. Valdiserri (Eds.) *Unequal Opportunity: Health Disparities Affecting Gay and Bisexual Men in the United States*. New York: Oxford University Press.
- Purcell, D.; Patterson, J.D. & Spikes, P.S., Jr. 2008. Childhood sexual abuse experienced by gay and bisexual men: Understanding the disparities and interventions to help eliminate them. In: R. Wolitski; R. Stall & R.O. Valdiserri (Eds.) *Unequal Opportunity: Health Disparities Affecting Gay and Bisexual Men in the United States*. New York: Oxford University Press.
- Signorile, M. 1997. *The Signorile Report on Gay Men: Sex, Drugs, and the Passages of Life*. New York: Harper Collins Publishers.
- SPSS Inc. 2008. *SPSS 16.0 for Windows*. Chicago: SPSS Inc.
- Stall, R.; Friedman, M. & Catania, J. 2008. Interacting epidemics and gay men's health: A theory of syndemic production among urban gay men. In: R. Wolitski; R. Stall & R.O. Valdiserri (Eds.) *Unequal Opportunity: Health Disparities Affecting Gay and Bisexual Men in the United States*. New York: Oxford University Press.
- Stall, R.; Mills, T. C.; Williamson, J.; Hart, T.; Greenwood, G.; Paul, J.; Pollack, L.; Binson, D.; Osmond, D. & Catania, J.A. 2003. Association of co-occurring psychosocial health problems and increased vulnerability to HIV/AIDS among urban men who have sex with men. *American Journal of Public Health* 93 (6): 939-42.



- Stolte, I.; De Wit, J. & Kolader, M. 2006. Association between 'safer sex fatigue' and rectal gonorrhea is mediated by unsafe sex with casual partners among HIV-positive homosexual men. *Sexually Transmitted Diseases* 33 (4): 201-08.
- Taywaditep, K.J. 2001. Marginalization among the marginalized: Gay men's anti-effeminacy attitudes. *Journal of Homosexuality* 42 (1): 1-28.
- United States Census Bureau. 2008. *State and County Quickfacts, Miami-Dade County, FL*. Available at: <http://quickfacts.census.gov/qfd/states/12/12086.html>
- Vincke, J. & Bolton, R. 1994. Social support, depression, and self-acceptance among gay men. *Human Relations* 47 (9):1049-62.
- Watters, J.K. & Biernacki, P. 1989. Targeted sampling: Options for the study of hidden populations. *Social Problems* 36 (4): 416-30.
- Webster, R.D.; Darrow, W.W.; Paul, J.P.; Roark, R.A.; Woods, W.J. & Stempel, R.R. 2003. HIV infection and associated risks among young men who have sex with men in a Florida resort community. *Journal of Acquired Immune Deficiency Syndromes* 33 (2): 223-31.